

**MHI  
Copy 3**

**FM 10-64**

**DEPARTMENT OF THE ARMY FIELD MANUAL**

---

**QUARTERMASTER  
CLASS II AND IV  
SUPPLY IN  
THEATERS OF  
OPERATIONS**

**QUARTERMASTER LIBRARY  
QUARTERMASTER SCHOOL, U. S. ARMY  
THEATER COMMAND, U. S. ARMY  
FORT LEE, VA.**



**HEADQUARTERS, DEPARTMENT OF THE ARMY  
DECEMBER 1957**

FIELD MANUAL

No. 10-64

HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
WASHINGTON 25, D. C., 30 December 1957

## QUARTERMASTER CLASS II AND IV SUPPLY IN THEATERS OF OPERATIONS

	Paragraphs	Page
CHAPTER 1. INTRODUCTION.....	1-3	3
2. QUARTERMASTER UNITS FOR CLASS II AND IV SUPPLY		
Section I. Nondivisional units.....	4-9	5
II. Divisional units.....	10-12	11
III. Related units.....	13, 14	12
CHAPTER 3. SUPPLY		
Section I. Responsibility.....	15-22	21
II. Supply Principles.....	23, 24	27
III. Requirements.....	25-28	30
IV. Requisitioning.....	29-32	38
CHAPTER 4. SOURCES AND METHODS OF SUPPLY .....	33, 34	44
5. DISTRIBUTION.....	35-47	47
6. STORAGE.....	48-53	61
7. STOCK CONTROL.....	54-60	70
8. AERIAL SUPPLY OPERATIONS.....	61-63	78
9. AMPHIBIOUS OPERATIONS.....	64-67	86
APPENDIX I. REFERENCES.....		88

	Paragraphs	Page
APPENDIX II. REGULATED ITEMS		
LIST.....		93
III. REQUISITIONING		
SCHEDULE.....		95
IV. EXPENDABLES ISSUED		
THROUGH CLASS I		
SUPPLY POINTS.....		98
INDEX.....		99

# CHAPTER 1

## INTRODUCTION

---

### 1. Purpose

This manual provides basic information and procedures on the supply of quartermaster class II and IV supplies in theaters of operations.

### 2. Scope

a. This manual contains information concerning the types, employment, and organization of quartermaster units engaged in quartermaster class II and IV supply operations. It sets forth the principles of quartermaster class II and IV supply; and the sources, storage, and distribution of quartermaster class II and IV supplies under normal and special situations.

b. Information in this manual represents current policy. Policies are subject to modification which will result in publication of changes. Users of this manual are requested to submit recommendations for changes or corrections direct to the Commanding General, Quartermaster Training Command, Fort Lee, Virginia. Information, guidance, and format for the preparation of recommendations are contained in AR 310-3.

c. The material presented herein is applicable without modification to both atomic and non-atomic warfare.

### 3. Definitions

*a. Class II and IV Supplies.* Class II and IV supplies are items of supplies and equipment issued to individuals or organizations.

- (1) *Class II.* The term class II is used to designate items of supplies and equipment issued to a unit or an individual on the basis of allowances prescribed by tables of organization and equipment, tables of allowances, equipment modification lists, or other appropriate tables or lists.
- (2) *Class IV.* The term class IV is used to designate items of supplies and equipment for which prescribed allowances have not been established and which must be procured and issued by special authorization.

*b. Regulated Supplies.* Regulated supplies are items which are scarce, costly, or of a highly technical or hazardous nature and over which proper authority exercises close supervision of distribution to individuals, units, or commands.

*c. Expendable Supplies.* Expendable supplies are items that are consumed or lose their identity in use, such as office supplies, paint, and repair parts.

## **CHAPTER 2**

### **QUARTERMASTER UNITS FOR CLASS II AND IV SUPPLY**

---

#### **Section I. NONDIVISIONAL UNITS**

#### **4. Quartermaster Clothing and General Supply Depot Company**

The Quartermaster Clothing and General Supply Depot Company (TOE 10-227) is the principle nondivisional unit engaged in the supply of quartermaster class II and IV supplies. The company provides administrative and technical personnel for the operation of a quartermaster clothing and general supply depot in either the communications zone or the army area. When labor is provided, it can receive, store, maintain a reserve stockage, and supervise the distribution of clothing and general supplies for a field army or an equivalent number of troops. It consists of company headquarters, office of the depot commander, depot headquarters platoon, and three identical operating platoons. Each platoon can operate an independent class II and IV supply installation in support of 100,000 individuals. In army area the company is normally attached to a Headquarters and Headquarters Detachment, Quartermaster Battalion, (TOE 10-536) and operates the army class II and IV depot under the technical supervision of the class II and IV section of the army quartermaster. In the communications zone the company normally

operates a quartermaster class II and IV depot under the command and supervision of a Headquarters and Headquarters Company, Quartermaster Depot (TOE 10-521).

## **5. Quartermaster Supply Depot Company**

The Quartermaster Supply Depot Company (TOE 10-367) provides administrative and technical personnel for the operation of a quartermaster depot handling all classes of quartermaster supply. It is normally employed in the communications zone and may be attached to a Headquarters and Headquarters Detachment, Quartermaster Battalion, (TOE 10-536), or other appropriate headquarters. It consists of a depot headquarters, company headquarters, supply section, and petroleum section. When labor is provided, it can receive, store, maintain a reserve stockage, and supervise the distribution of all classes of quartermaster supplies for approximately 50,000 individuals. When augmented with appropriate personnel from other technical services, the company can perform the operating functions of a small depot company for the support of 35,000 troops.

## **6. Quartermaster Service Company**

The Quartermaster Service Company (TOE 10-67) provides military personnel for general labor when security and strict military control are required. It consists of a company headquarters and four identical platoons, each consisting of two sections. The company may operate as a

unit or as platoons or sections to provide military personnel for the physical operation of depots operated by either the quartermaster clothing and general supplies depot company or the quartermaster supply depot company. The company is normally attached to a headquarters and headquarters detachment, quartermaster battalion, in either the combat or the communications zone.

## **7. Supply and Labor Teams**

*a. Supply Teams.* The following supply teams of the Quartermaster Service Organization (TOE 10-500) have class II and IV responsibilities:

- (1) *Team BA.* Team BA provides administrative, technical, supervisory personnel, for the receipt, storage, and issue of clothing and general supplies for 3,500 to 7,500 troops.
- (2) *Team BB.* Team BB is generally similar to team BA, but can support 7,500 to 15,000 troops.
- (3) *Team BC.* Team BC is generally similar to team BA, but can support 15,000 to 25,000 troops.
- (4) *Team BF.* Team BF is a sales detachment which provides cash sales of non-issue items to military personnel in the field. It is capable of handling the sales requirements of 20,000 individuals. It may be supported by team BG, which may be used as a distributing agency. Team BG may not be used separately.



*b. Labor Teams.* The following labor teams of the Quartermaster Service Organization (TOE 10-500) may be used in connection with quartermaster II and IV supply (these teams may be attached to depot units and other headquarters as required).

- (1) *Team FA.* Team FA provides military personnel capable of handling approximately 15 tons of general supplies per day.
- (2) *Team FB.* Team FB provides military personnel capable of handling 25 tons of general supplies per day.
- (3) *Team FC.* Team FC provides personnel capable of handling 40 tons of general supplies per day.

## **8. Quartermaster Parts Company**

The Quartermaster Parts Company (TOE 10-127) provides stock control and storage of repair parts for the repair and maintenance of quartermaster mechanical and other equipment for which the Quartermaster Corps has repair parts responsibility. A parts company can normally handle the quartermaster repair parts requirements of a depot supporting a field army or an equivalent number of troops. It is normally employed in the type field army. It may be located in the communications zone where it is assigned responsibility for the operation of a depot with the key mission of quartermaster repair parts supply. It may, therefore, operate as an element

of a quartermaster depot with a single mission or multiple missions. At a depot with multiple missions, it normally operates under the operational control of a Headquarters and Headquarters Company, Quartermaster Depot, (TOE 10-521), and the administrative control of a Headquarters and Headquarters Detachment, Quartermaster Battalion, (TOE 10-536). At a quartermaster branch depot with the single mission of class II and IV supply, it will operate with a Quartermaster Clothing and General Supplies Depot Company (TOE 10-227). Under such an arrangement, it may be deployed in sections to provide a series of repair parts installations. When so deployed, a stock control section and a storage section must always operate together.

## **9. Supervisory Units**

*a. Headquarters and Headquarters Company, Quartermaster Depot.* The Headquarters and Headquarters Company, Quartermaster Depot (TOE 10-521), is a command agency that provides supervisory and administrative personnel for a quartermaster branch depot or the quartermaster section of a general depot in the communications zone. To this headquarters are attached a varying number of units, which may include a quartermaster clothing and general supplies depot company together with such quartermaster service companies and other quartermaster troop units as may be designated. If necessary, a headquarters and headquarters detachment, quartermaster battalion, may be attached

to provide administrative control over subordinate units.

*b. Headquarters and Headquarters Detachment, Quartermaster Group.* The Headquarters and Headquarters Detachment, Quartermaster Group, (TOE 10-22), is a command agency that provides administrative and supervisory personnel for attached quartermaster units. To this headquarters are attached three or more headquarters and headquarters detachments, quartermaster battalion, and subordinate units. The headquarters and headquarters detachment, quartermaster group, may be employed in the communications zone to provide a command agency for quartermaster operations within a section of the communications zone. It may be employed in the army area to provide a coordinating headquarters for quartermaster nondivisional units which may be assigned on an area or functional basis.

*c. Headquarters and Headquarters Detachment, Quartermaster Battalion.* The Headquarters and Headquarters Detachment, Quartermaster Battalion, (TOE 10-536), is a command agency which provides administrative and supervisory personnel for attached units. It represents the lowest level at which quartermaster units are brought together under coordinated control. The particular units attached depends on the location and mission of the battalion. This headquarters and its attached units may, in turn, be attached to a headquarters and headquarters detachment, quar-

termaster group or to a headquarters and headquarters company, quartermaster depot.

## **Section II. DIVISIONAL UNITS**

### **10. Quartermaster Company, Infantry Division**

Within the infantry division the supply of quartermaster class II and IV items is accomplished by the class II and IV section of the Quartermaster Company, Infantry Division (TOE 10-17). This section consolidates divisional requisitions for quartermaster class II and IV supplies and submits the consolidated requisitions to the appropriate army class II and IV depot. It operates the division quartermaster class II and IV distributing point where bulk supplies are broken down for unit distribution on vehicles provided by the division transportation battalion. The class II and IV section also packages limited quantities of supplies for aerial delivery by Army aircraft.

### **11. Quartermaster Supply Company, Armored Quartermaster Battalion**

Within the armored division, the supply of quartermaster class II and IV items is accomplished by the class II and IV section of the supply platoon of the Quartermaster Supply Company, Armored Quartermaster Battalion (TOE 10-47). This section is responsible for consolidating divisional requisitions of quartermaster class II and IV supplies and submitting these consolidated requisitions to the appropriate army class II and IV depot. It operates the division quartermaster

class II and IV distributing point and provides limited packaging of supplies for aerial delivery by divisional aircraft.

## **12. Airborne Supply and Transportation Company**

Within the airborne division, the supply of quartermaster class II and IV items is accomplished by the class II and IV section of the supply platoon of the Airborne Supply and Transportation Company, Airborne Division. This section operates the division quartermaster class II and IV distributing point, where bulk supplies are broken down for unit distribution. The section may package limited quantities of supplies for aerial delivery by army aircraft. The section is also responsible for delivering class II and IV items to the using units by the method of unit distribution.

### **Section III. RELATED UNITS**

## **13. Maintenance Units**

As the return of material from maintenance units to supply channels constitutes a major source of quartermaster class II and IV supply in a theater of operations, quartermaster maintenance units have a definite relationship to quartermaster class II and IV supply. Principal among quartermaster maintenance units are—

*a. Quartermaster Salvage Company.* The Quartermaster Salvage Company (TOE 10-187) receives, classifies, and supervises the evacuation of all classes of quartermaster salvage for a force

of approximately 100,000 troops. It also receives and disposes of discarded items for other technical services. The company consists of a company headquarters and two identical platoons of three sections each. Each section can operate a salvage point. The company may be employed in the communications zone. It may be employed as a nondivisional unit in the combat zone to provide support to a corps or augment the salvage capability of organic division quartermaster companies.

*b. Quartermaster Reclamation and Maintenance Company.* The Quartermaster Reclamation and Maintenance Company (TOE 10-237) provides field maintenance and reclamation of common items of quartermaster clothing and equipment. The company will be employed in the army area to provide field maintenance of quartermaster class II and IV items in support of approximately 96,000 troops. The company consists of a company headquarters, parachute packing and maintenance section, and two identical platoons. Each platoon consists of a shoe repair section, clothing and textile repair section, and an equipment repair section. The company normally performs field maintenance of quartermaster equipment for return to using organizations or to supply channels at the lowest practicable level. Quartermaster material beyond the capability of the quartermaster reclamation and maintenance company is normally returned, through maintenance channels, to fixed quartermaster maintenance installations in the communications zone.

c. *Quartermaster Clothing and Textile Repair Company.* The Quartermaster Clothing and Textile Repair Company (TOE 10-437) provides depot repair for clothing, textiles, and shoes in a fixed installation. It is normally attached to a headquarters and headquarters detachment, quartermaster battalion, and is normally located in the communications zone. When augmented by civilian or military labor, it is capable of performing depot repair of clothing and textiles for a field army for an equivalent number of troops.

d. *Quartermaster Mechanical and Metal Repair Company.* The Quartermaster Mechanical and Metal Repair Company (TOE 10-427) provides depot repair for quartermaster mechanical and metal items of equipment in a fixed installation. It is normally attached to a headquarters and headquarters detachment, quartermaster battalion, and is normally located in the communications zone. When military or civilian labor is provided, the company can perform depot repair of quartermaster mechanical items for a field army for an equivalent number of troops.

e. *Maintenance Teams.* The following maintenance teams of the Quartermaster Service Organization (TOE 10-500) may be used to augment quartermaster maintenance units in the theater:

- (1) *Clothing, textile, and shoe repair detachments.* There are eight clothing, textile, and shoe repair detachments. These detachments are generally similar in that they provide personnel for the operation

of fixed clothing, textile, and shoe repair installations. As these personnel are primarily supervisory, labor must be furnished from the labor team of the Quartermaster Service Organization, or other sources. The capability of each detachment is the distinguishing feature. The capabilities vary from support of a force of approximately 2,500 troops to support of a force of approximately 20,000 troops.

- (2) *Clothing repair detachments.* There are two clothing repair detachments. Each provides personnel for the operation of a semimobile clothing repair facility on a shift basis. These detachments may be used to augment the Quartermaster Reclamation and Maintenance Company (TOE 10-237). The detachments are capable of supporting a force of approximately 24,000 troops.
- (3) *Shoe repair detachments.* The two shoe repair detachments are employed in the same manner as the clothing repair detachments and have the same capabilities—24,000 troops.
- (4) *Textile repair detachment.* The two textile repair detachments are employed in the same manner as the clothing repair and the shoe repair detachments, and are capable of supporting 24,000 troops.
- (5) *Mechanical and metal repair detachment.* The mechanical and metal repair detach-



ment, which is capable of supporting a force of 24,000 troops, may be used to augment the Quartermaster Reclamation and Maintenance Company (TOE 10-237).

- (6) *Office machine repair detachments.* There are three office machine repair detachments, one of which is used to provide personnel for the operation of fixed office machine facility, and may be used to augment the Quartermaster Mechanical and Metal Repair Company (TOE 10-427). When labor is provided, the detachment is capable of supporting a force of 50,000 troops. The other two detachments are used to operate mobile office machine repair facilities and are capable of supporting a force of approximately 24,000 troops.
- (7) *Refrigeration repair detachments.* There are two refrigeration repair detachments. One provides personnel for the operation of a fixed refrigeration repair; the other provides personnel for a mobile refrigeration repair activity. The fixed detachment, which must be augmented by labor teams from the quartermaster service organization or other sources, has a capability of 50,000 troops. The mobile detachment has a capability of 24,000 troops.
- (8) *Food service equipment repair detachment.* The food service equipment repair

detachment provides personnel for the operation of a mobile food service equipment repair facility with a capability of 24,000 troops.

(9) *General equipment repair detachment.*

The general equipment repair detachment provides personnel for the operation of a mobile quartermaster general equipment repair facility with a capability of 24,000 troops.

- (10) *Salvage detachments.* There are two salvage detachments. These provide personnel for the receipt, classification, and supervision of the evacuation of all classes of salvage. They are capable of handling the salvage expectancy of 16,000 troops.

#### **14. Aerial Supply Units**

*a. Quartermaster Aerial Supply Company.* The Quartermaster Aerial Supply Company (TOE 10-407) provides parachute packing, temporary storage, and rigging of supplies and equipment for aerial delivery by Army or Air Force aircraft. The personnel of the company may parachute into the area in which the supplies are dropped to assist in the recovery and evacuation of parachutes and allied equipment. The company consists of a company headquarters, two identical supply and service platoons, and two identical aerial supply platoons. The company is a non-divisional unit and is normally attached to a headquarters and headquarters detachment, quar-

termaster battalion. It may be assigned to a theater, communications zone, logistical command, army, or independent corps, as required, to accomplish its assigned mission. At full strength, the company is capable of requisitioning, receiving, storing, rigging, and packing parachutes for the aerial delivery of 150 tons of selected items of all classes of supplies and equipment daily.

*b. Quartermaster Air Equipment Repair and Depot Company.* The Quartermaster Air Equipment Repair and Depot Company (TOE 10-417) provides field and depot repair for quartermaster air items of equipment and for the receipt, storage, and issue of these items in a fixed installation. The company is normally employed in the communications zone and attached to a headquarters and headquarters detachment, quartermaster battalion. It is capable of performing its assigned mission in support of a force equivalent to two airborne divisions and aerial service supporting troops. It may be augmented to serve a force equivalent to three airborne divisions and aerial service supporting troops, when required and approved by the Department of the Army.

*c. Airborne Quartermaster Parachute Supply Company.* The Airborne Quartermaster Parachute Supply Company (TOE 10-337) is organic to the airborne division. It requisitions, inspects, packs, stores, maintains, and issues, quartermaster air items required for aerial delivery of personnel, supplies, and equipment in support of the airborne division. It consists of a company head-

quarters, supply platoon, maintenance platoon, packing platoon, and aerial delivery platoon.

*d. Quartermaster Special Forces Parachute Rigging Detachment.* The Quartermaster Special Forces Parachute Rigging Detachment (TOE 10-419) is used to provide parachute support for a special forces operation and is normally assigned to a headquarters and headquarters company, special forces group. It is capable of supporting drops of up to 150 individuals per day.

*e. Aerial Supply Teams.* The following aerial supply and maintenance teams of the Quartermaster Service Organization (TOE 10-500) may be employed to augment quartermaster aerial supply units in the theater:

- (1) *Aerial supply detachment.* The aerial supply detachment provides personnel for the packaging, temporary storage, and supervision of loading 15 tons of supplies per day to be delivered by parachute or free drop.
- (2) *Drop kit repair detachment.* The drop kit repair detachment provides personnel for the field and depot repair of drop kit items of equipment for a force equivalent to one airborne division and supporting troops.
- (3) *Parachute repair detachment.* The parachute repair detachment provides personnel for field and depot repair of parachutes for a force equivalent to one airborne division and supporting troops.

- (4) *Parachute packing detachment.* The parachute packing detachment provides personnel for limited repair and packing of 1,000 personnel-type parachutes per month.
- (5) *Special forces parachute rigging detachment.* The special forces parachute rigging detachment provides personnel for the parachute maintenance support of special and security forces. It is capable of requisitioning, storing, inspecting, packing, and maintaining 840 personnel and 840 cargo parachutes.

## **CHAPTER 3**

### **SUPPLY**

---

#### **Section I. RESPONSIBILITY**

##### **15. General**

In the chain of control of quartermaster class II and IV supply, higher echelons do the planning and develop broad policies. Subordinate staff echelons implement these policies, control critical items, control the flow and distribution of stock items, and supervise the system of quartermaster depots. Supply responsibilities rest on the theater army, communications zone, army, corps, and division quartermasters, and on commanders of quartermaster units engaged in the supply of quartermaster clothing and general supplies.

##### **16. Theater Army Quartermaster**

The theater army quartermaster, subject to G4 supervision and coordination, is responsible for—

- a.* Supervising the determination of quartermaster class II and IV supply requirements.
- b.* Exercising overall supervision of requisitioning, procurement, storage, distribution, and documentation of quartermaster class II and IV supplies.
- c.* Allocating quartermaster class II and IV supplies and equipment in critical supply in ac-

cordance with priorities established in coordination with G3 and G4.

*d.* Supervising both current and future operations. Preparing and coordinating plans for quartermaster operations on a broad scale with operational functions and implementation carried out at subordinate commands.

*e.* Preparing plans for the procurement, storage, distribution, and maintenance of quartermaster class II and IV supplies.

*f.* Planning and supervising quartermaster technical inspections of class II and IV supplies. He recommends technical assistance to insure adherence to established quartermaster policies.

*g.* Planning and supervising maintenance, reclamation, repair, and salvage of quartermaster class II and IV supplies and equipment.

*h.* Supervising operations of the quartermaster supply control system for the theater army forces.

*i.* Coordinating assignment of class II and IV supply missions to quartermaster organizations on a theater-wide basis.

*j.* Coordinating class II and IV supply operations of quartermaster organizations in compliance with schedules, plans, and orders of higher headquarters.

*k.* Coordinating allocation of supplies to quartermaster class II and IV supply depots in the theater.

## **17. Communications Zone Quartermaster**

The communications zone quartermaster, subject to G4 supervision and coordination, imple-

ments the plans and directives of the theater army quartermaster for quartermaster support in the theater. He is responsible for all quartermaster supply activities in the communications zone, and for the flow of supplies through the communications zone into the combat zone. He is responsible for the efficient operation of quartermaster depots, for the maintenance of stock levels and stock control, and for the control of critical items as necessary. He supervises and coordinates stock levels, distribution of supplies, and procurement within established policies. He allots supply personnel, including troop units, civilian labor, and prisoners of war allocated for quartermaster use within the communications zone. He is responsible for the consolidation of requisitions for transmission to the zone of the interior. He insures compliance with supply policies of the theater army quartermaster, the communications zone commander, the communications zone G4, and advises those officers on quartermaster supply matters. He has the following responsibilities relative to quartermaster class II and IV supply:

a. Advises the communications zone commander and his staff on technical matters relating to quartermaster class II and IV supply.

b. Determines requirements for quartermaster class II and IV supply within the theater and makes recommendations to the theater army quartermaster.

c. Prepares plans and orders to implement decisions of the communications zone commander per-



taining to quartermaster class II and IV supply.

*d.* Furnishes to higher headquarters troop requirements for quartermaster nondivisional units to be employed at quartermaster class II and IV supply installations.

*e.* Requisitions quartermaster class II and IV supplies from the continental United States or procures supplies locally.

*f.* Operates the theater quartermaster class II and IV central stock control.

*g.* Determines supply levels to be maintained in each of the sections of the communications zone.

## **18. Section Quartermasters**

A communications zone that covers a large area may be divided into one or more sections.

*a. Base Section Quartermaster.* The base section quartermaster supervises the operations of quartermaster class II and IV supply installations within the base section. He insures that such supplies are forwarded to either an installation in the intermediate or advance section, or to a field army installation.

*b. Intermediate Section Quartermaster.* The intermediate section quartermaster supervises the receipt of quartermaster class II and IV supplies shipped from the base section, the shipment of these supplies on receipt of requests, and the operation of supply depots for advance section support.

*c. Advance Section Quartermaster.* The advance section quartermaster supervises the for-

warding of quartermaster class II and IV supplies from the advance section to depots in the combat zone. He maintains close liaison with field army quartermasters.

*d. District and Area Quartermasters.* District and area quartermasters perform the same functions for their districts and areas (FM 100-10) as section quartermasters perform for their sections.

*e. Logistical Command Quartermasters.* Logistical command quartermasters become staff quartermasters in areas or sections commanded by logistical commands (FM 100-10).

## **19. Army Group Quartermaster**

The army group quartermaster recommends priorities and necessary allocations of quartermaster class II and IV supplies within the army group. He reviews and makes recommendations on requests from armies for quartermaster class II and IV regulated supplies and items in short supply. He prepares estimates of quartermaster class II and IV supply requirements for proposed operations and maintains statistical data concerning quartermaster class II and IV supply within the army group. The army group quartermaster receives information concerning quartermaster class II and IV supplies from theater army and communications zone commanders, and prepares extracts from such directives for transmission to army quartermasters. He also makes inspections of quartermaster class II and IV supplies as required or directed, and recom-

mends methods for improving quartermaster class II and IV supply operations.

## **20. Army Quartermaster**

Quartermaster supply in the combat zone, with respect to an individual field army, is the responsibility of the army quartermaster. He recommends the stock levels to be established in army depots; assigns quartermaster troop units within the army service area; supervises the operations of quartermaster supply agencies; supervises local procurement of quartermaster supplies in the army area; acts on requisitions; allocates critical items, as directed; and exercises staff supervision over quartermaster class II and IV supply for the field army.

## **21. Corps Quartermaster**

A corps, as a tactical unit, is not normally in the chain of supply operations. Corps troops, including quartermaster units, receive their quartermaster supplies from installations designated by the army quartermaster. The corps quartermaster must coordinate with the army quartermaster in regard to critical items. When the corps is operating independently, it is both tactical and administrative. In this case, the corps quartermaster assumes the same functions as prescribed for the army quartermaster.

## **22. Division Quartermaster**

The division quartermaster of the infantry and armored division is responsible for the quarter-

master supply of the division. In the infantry division, he exercises operational control over division quartermaster troops and activities. In the armored division, he has command responsibility over the division quartermaster troops and activities. In the airborne division, the division supply officer, as a member of the staff of the division support group commander, is responsible for the supply of quartermaster class II and IV items within the division. This responsibility does not include repair parts and secondary items or quartermaster air-type equipment. The airborne division supply officer also commands the Airborne Supply and Transportation Company.

## **Section II. SUPPLY PRINCIPLES**

### **23. General**

The system of quartermaster class II and IV supply within a theater of operations must be adapted to the particular theater and must provide clothing, general supplies, and equipment at the time and in the quantities and types required. Quartermaster class II and IV supply must move from the rear forward to the point of delivery. Each echelon makes supplies available as close to using personnel as the situation permits. However, units are responsible for requesting supplies based on requirements.

### **24. Fundamental Precepts**

*a. Simplicity.* Quartermaster class II and IV supply procedures in a theater of operations must

be direct, flexible, and carefully planned. All non-essential channels and unnecessary documents and processing, which delay the delivery of supplies to the troops, must be eliminated. Reports must be simple, channels as direct as possible, and responsibility clearly defined. Routine operations must be accomplished at the lowest echelon possible.

*b. Supply Continuity.* Quartermaster class II and IV supply must be continuous and uninterrupted. When a new supply installation is opened, the old supply installation should be exhausted either by issue or transfer of all stocks. When old supply installations cannot be closed out by issue, the remaining supplies may be loaded for a forward movement or transferred to an echelon to the rear. Generally, when the new supply installation opens, it must be capable of full operation. Supported units must be informed as to the closing date of the old installation and the location and opening date of the new installation.

*c. Flexibility and Mobility.* The supply system for quartermaster class II and IV supplies must be capable of rapid adjustment to meet sudden changes in tactical operations. Decentralization of operations, efficient administrative control, and careful selection of locations insure flexibility and mobility of the supply system. Supply installations must be dispersed laterally and in depth in order to take advantage of existing transportation nets and labor sources, to preclude destruction of supplies, and to provide flexibility to meet unforeseen situations or emergency changes.

*d. Coordination.* Flexibility in planning quartermaster class II and IV operations requires complete coordination among all elements of the quartermaster staff sections. The quartermaster must coordinate with the general staff and with special staff officers in the adjustment of plans to fit new information or changed situations or to provide additional details. Close liaison must be maintained with subordinate echelons as to their capabilities and requirements.

*e. Supply Economy.* Supply economy is the action taken to insure the proper care, preservation, conservation, and maximum utilization of all military supplies. Quartermaster staff officers and commanders of quartermaster units and installations must issue definite instructions on, exercise constant supervision of, and require strict adherence to sound economic supply procedures. They must rigidly enforce all directives concerning supply economy. To insure that supply economy is being effected, the following practices and procedures must be observed:

- (1) Constant inspections must be made to determine that supply economy is being practiced.
- (2) Supplies and equipment must be used for their intended purpose.
- (3) Rigid adherence must be made to authorized allowances.
- (4) All excesses must be returned to proper supply channels.

- (5) Maximum utilization must be made of available substitute items when standard items are not available.
- (6) Issues in excess of authorized allowances must be approved through command channels.
- (7) Salvage and maintenance procedures must be so organized that repairable items will be returned to supply channels at the lowest possible echelon.

### **Section III. REQUIREMENTS**

#### **25. General**

For the theater as a whole, responsibility for determining requirements falls on theater army and communications zone headquarters. In a widespread theater with many projected operations of varying size and character, requirements planning might well be retained at theater army level. In this case, the theater army quartermaster determines requirements and prepares his portion of any resulting projects. On the other hand, in a well-established theater where subsequent operations are extensions of or continuance of an assigned mission, the determination of requirements is the responsibility of the communications zone commander and his staff. The communications zone quartermaster performs functions previously discussed for the theater army quartermaster. Reliable data must be obtained to serve as a basis to determine the initial supply requirements, to establish reserves of the items

themselves, and to aid in the establishment of repair parts and other maintenance needs.

## **26. Initial Requirements**

Initial supply requirements are those allowances prescribed in tables of organization and equipment, tables of allowances, equipment modification lists, and similar authorizations. These requirements are primarily the responsibility of the zone of the interior. As units are activated within the theater, however, requirements for initial issue of equipment will arise. The following formula is used to obtain the initial issue requirement—allowance per individual times the number of individuals authorized to have the item. Since the computation of these initial quartermaster supply requirements and the determination of shortages are quartermaster functions, commanders and staffs must provide quartermasters with—

- a. Troop basis and allowance authorizations under which troops and installations are to be supplied.
- b. Status of supplies in hands of troop units.
- c. Dates of arrival or activation of troop units.
- d. Dates on which supplies are needed for installations of the command.

## **27. Replacement and Consumption Requirements**

Replacement and consumption requirements pertain to those supplies that keep initial requirements up to authorized amounts and replenish those that are worn out or consumed.



*a. Levels of Supply.* Levels of supply is a general supply term used for planning purposes and in overall control of supply operations. It expresses quantities of material in *days of supply* or, in certain cases, in specific units of quantity. A *day of supply* is the quantity of supplies required to support the troops employed for 1 day.

- (1) *Operating level.* The operating level is the quantity of material required to sustain operations in the interval between the arrival of successive shipments. The maximum operating level is authorized by higher headquarters.
- (2) *Safety level.* The safety level is that quantity (in addition to the operating level) of material required to be on hand to permit continued operations during minor interruptions of normal replenishment or unpredictable fluctuation in supply demand.
- (3) *Stockage objective.* Stockage objective is the maximum quantity of material required to be on hand to sustain current operations. It represents the sum of the operating level and the safety level.
- (4) *Order and shipping time.* Order and shipping time is the time interval between the preparation of the requisition and the receipt of the supplies in the theater. It is established by agreement between the oversea commander and the chief, oversea supply agency, at the des-

ignated army terminal serving the command.

- (5) *Requisitioning objective.* The requisitioning objective is the maximum quantity of supplies to be maintained on hand and on order to sustain current operations. It is determined by adding the stockage objective in days of supply to the order and shipping time.

*b. Factors and Rates.* Replacement factors and consumption rates are used to determine quantity requirements for quartermaster supplies. As troops normally arrive in the theater with their authorized equipment, most requirements are for replacement and/or replenishment. Experience gained in the theater will be used to determine more accurate replacement factors and consumption rates.

- (1) *Replacement factors and requirements.*

- (a) A replacement factor for an item of clothing and individual equipment represents the quantity of an item required for issue to each using individual a month, and includes the individual allowance in effect for the item. The formula for computation of a replacement factor is as follows—issues per month divided by the number of months in the period, divided by the strength. To obtain a quantitative replacement requirement for an item of clothing and equipment for 1 month, the replacement factor for an indi-

vidual item is multiplied by the total number of individuals authorized issue of the item during a given month.

(b) A replacement requirement for airborne equipment for operational airdrops is obtained by multiplying the airborne equipment authorized to be airdropped by the replacement factor for the item.

(c) A monthly replacement requirement for other items, including airborne equipment used for training purposes, is obtained by multiplying the total items authorized to be in use during a given month by the replacement factor for the item.

(2) *Consumption rates and requirements.*

(a) A consumption rate represents the average quantity of an item expended during a given time interval by a specified number of users. The formula for obtaining the consumption rate is as follows—issue per month divided by the number of months in the period, divided by the strength in 1,000's. Typical factors for consumption rates of class II and IV supplies are usual quantity for 1,000 men per month. To obtain a quantitative consumption requirement for a quartermaster item for 1 month, the consumption rate is multiplied by the

average number of using individuals authorized to consume the item (in thousands) during the month.

- (b) A tabulation of wartime replacement factors and consumption rates for standard quartermaster items of supply is contained in SB 10-496.
- (3) *Demand experience data.* Demand experience data is required in order to meet demands of contemplated operations. Theater army quartermasters obtain necessary data based on experience from using units in the theater. Demand experience data for quartermaster class II and IV supplies must be maintained by all quartermasters in the theater. Factors used in determining replacement and consumption requirements will thereby be constantly improved.
- (4) *Size tariffs.* Size tariffs are used by quartermasters in estimating requirements for items of clothing, equipage, and footwear (SB 10-523). Size tariffs are used for planning purposes. They are guides to distribution and range of sizes of items. Shipments by tariff sizes are made only in the absence of specific information on the troops to be supplied.
- (5) *Other factors affecting requirements.*

- (a) Seasonal changes of clothing and equipment.
- (b) Increased needs preparatory to certain tactical movements and refitting of units after combat.
- (c) Regulation of items in short supply.
- (d) A normally longer interval between the time requisitions are initiated and the supplies are received.
- (e) Changes in the composition of the forces to be supported.
- (f) Revision of replacement factors and consumption rates as the result of demand experience.

## **28. Project Requirements**

Project requirements pertain to those supplies not included in normal allowances but necessary to complete a specific task. Project requirements normally refer only to class IV supplies.

*a. Types.* Normally, project requirements are classified as operational, development, or maintenance.

- (1) Operational project requirements provide additional supplies for tactical operations. For example, additional cold weather clothing may be authorized for a specific tactical operation.
- (2) Development project requirements provide supplies for the construction, reconstruction, development, or remodeling of military or civilian installations, utilities, or facilities required to support

military forces or activities in theaters. For example, special quartermaster supplies and equipment may be authorized to put civilian facilities, such as laundries, into operation for military use.

- (3) Maintenance project requirements provide supplies for normal day-to-day maintenance of installations, facilities, and utilities which are required to support overseas forces and military operations. For example, clothing or metal repair machinery may be authorized for a specific reclamation and maintenance project.

*b. Submission of Requirements.* Project requirements involving quartermaster supplies and equipment may originate in a theater, or may be included as a part of the Department of the Army plan for a specific operation. Emphasis must be placed on the early submission of theater project requirements to the Department of the Army in order that the demands of all theaters may be consolidated for orderly and economical procurement and supply. A period of up to 30 months may be required to procure large quantities of critical materials or to manufacture special items. This time element may require the Department of the Army to initiate and prepare special project requirements based on logistical studies and future operations while other operations are in progress. However, project requirements so initiated may be revised later, based on theater studies and recommendations.

*c. Theater Army Quartermaster Responsibility.* The theater army quartermaster's responsibility with respect to project requirements consists primarily of—

- (1) Reviewing Department of the Army project requirements pertaining to quartermaster activities in order to determine their suitability and to recommend necessary changes.
- (2) Determining quartermaster requirements for projects originating in the theater.
- (3) Preparing quartermaster plans, policies, and directives in the name of the theater army commander to subordinate commands to accumulate the needed quartermaster supplies for the project requirements.

#### **Section IV. REQUISITIONING**

##### **29. Types**

Requisitioning in the theater of operations is either formal or informal. Needs for quartermaster class II and IV supplies are made known through formal requisitioning procedure when authorized Department of Army supply forms are used for requesting supplies. Informal requisitioning may be performed by means of status reports, expenditure reports, or similar reports. Informal requisitions may be made orally in emergencies and confirmed in writing at a later date. When stocks are in short supply, both formal and informal requests form the basis for allocation

or shipment under priorities as the items become available.

### **30. Supply Action**

Requisitions normally are filled by the supply agency closest in the chain of supply to the troops requesting the supplies. Upon receipt of requisitions, the supply agency determines the availability of the items required. For items not available for shipment or issue in the usual time, a notice is sent to the requisitioning agency stating the date of expected availability, that substitution has been made, or that the item will not be available. If the supply agency cannot fill a requisition immediately, it furnishes what is on hand, extracts the unfilled items to the next higher supply officer, and notifies the headquarters from which the requisition was received when shipment may be expected.

*a. Dues Out.* Dues out are established when stocks of quartermaster class II and IV supplies are insufficient to fill a requisition. Under this system, all requisitioned items that are due out will be supplied as soon as they become available and duplicate requisitions are avoided. If it becomes necessary to re-requisition such items, units will be requested to submit new requisitions, and at the same time state that all previous requisitions for the same items are cancelled. Dues out are reviewed at class II and IV depots periodically by the stock control division or section and status reports prepared for transmittal to central stock control.



b. *Extract Requisitions.* Extract requisitions are prepared by quartermaster class II and IV depots when a requested item is not normally stocked at the depot. The extract is forwarded to the appropriate supply depot or agency for action.

c. *Regulated or Command Controlled Items.* Regulated or command controlled items are those items over which the quartermaster must exercise close supervision of issues on individual requests to insure proper distribution in accordance with existing priorities, and which are usually scarce, costly, or of a highly technical or hazardous nature.

- (1) *Regulated or oversea command controlled items lists.* Headquarters, Department of Army publishes regulated items lists for all technical services and forwards them to the theater. These lists are normally in the form of supply bulletins. Commanders at all echelons may control items which are in short supply or critical in nature. In so doing they normally publish controlled items lists or directives which require the same general procedures for obtaining such supplies or equipment as for regulated items. An item on the regulated items list can be deleted only through action by Headquarters, Department of the Army. Items are put on or deleted from local controlled items lists only by the commander who published the list.

A suggested list of regulated quartermaster class II and IV items is given in appendix II.

- (2) *Requests for regulated or command controlled items.* Requests for items on a regulated or command controlled items list must be processed through command channels. Intervening headquarters may recommend the issue priority only for those units under their control. Requests for those items will be submitted in accordance with schedules published in administrative orders, standing operating procedures, or other issue directives. Emergency requests may be submitted when required.

### **31. Requisitioning Class II Supplies**

a. Division units submit requests for quartermaster class II supplies to the office of the division quartermaster. The division quartermaster consolidates these requests and/or forwards them to the appropriate army class II and IV depot. The depot, in turn, issues the items requested. Items not available are extracted to the appropriate communications zone agency for supply actions. The depot stock is replenished periodically from designated communications zone class II and IV depots.

b. Nondivisional units in corps or army areas submit requests for class II supplies to their organizational supply officer. The latter consolidates the requests and forwards them to the

appropriate army class II and IV depot. The depot then issues the items requested.

c. Quartermaster class II supplies at communications zone level are the responsibility of the communications zone quartermaster, who submits requisitions for authorized supplies to the overseas supply agency at the designated army terminal in the continental United States.

### **32. Requisitioning Class IV Supplies**

In theaters of operation, class IV supplies usually are requested through command channels and allocated by commanders responsible for their issue.

a. Units assigned or attached to the division submit class IV supply requests to the division commander who recommends appropriate action. The requests then are forwarded to the army commander. The army commander, upon approving a requisition, sends it to the army class II and IV depot for issue of supplies or, when necessary, to the communications zone commander responsible for the supplies.

b. In the army area, all requests for class IV supplies from using units in the corps and army service area are sent through command channels to the army commander, who in turn may forward the requisitions to the advance section commander, or to the army depot for supply action.

c. In the communications zone, units submit requests for class IV supplies to the appropriate commander, who submits them to the designated

higher headquarters together with justifications for the supplies needed. After approval, the supplies are furnished to using units through normal supply channels.

## CHAPTER 4

### SOURCES AND METHODS OF SUPPLY

---

#### 33. Sources

Quartermaster class II and IV supplies are requisitioned from the continental United States, procured within the theater or from other theaters, and obtained by utilization of salvaged equipment and materiel and captured enemy stocks.

*a. Continental United States.* Requisition from the continental United States is the ideal method of insuring that an oversea command receives those items which are required to provide complete stocks.

*b. Other Theaters.* When directed by the Department of the Army, quartermaster class II and IV supplies may be procured from other theaters that have accumulated excesses, or that have had changes in their operational requirements.

*c. Local Sources.* Quartermaster class II and IV supplies within a theater of operations should be procured locally as long as the civilian economy of the theater is not adversely affected. Procedures for local procurement are prescribed by the theater commander in accordance with pertinent laws, regulations of higher authority, and law of land warfare. Local procurement generally

saves time, shipping facilities, and conserves natural resources of the continental United States.

*d. Repaired Items.* To the maximum extent possible, quartermaster class II and IV items should be obtained through the reuse of repaired items that have been restored to serviceable condition and returned to the supply system. The quantities of repairable items on hand and the repair parts necessary to restore these items to serviceable condition must be included in status reports of projected repair submitted to the central stock control system. These reports, indicating the projected items to be returned to stock, will reduce requisitioning requirements for items from other sources.

*e. Reclamation of Component Parts.* When it is determined at depot maintenance shops, within authorized policies of the Department of the Army and the theater command, that an item cannot be repaired, all component parts which may be used in the repair of similar or like items may be removed before forwarding items with the parts for scrap. They become repair parts in the supply system.

*f. Captured Items.* All captured class II and IV supplies and equipment will be utilized to the fullest extent to reduce the overall requirement from other sources.

- (1) Captured outer clothing, footwear, and mess gear are issued to prisoners of war. Captured inner clothing is issued to prisoners of war, allied troops, and civilians.

- (2) Captured equipment may be used by United States and allied troops.

### 34. Methods

*a. Automatic Supply.* Automatic supply is the method by which supply requirements are automatically furnished without requisition for a predetermined period of time, based upon estimated or usage experience factors. Automatic supply of class II and IV items is usually adopted in the initial phases of an amphibious or airborne operation when it is not feasible for a command to compute its requirements or to requisition supplies.

*b. Semiautomatic Supply.* During semiautomatic supply, some quartermaster class II and IV items are furnished automatically and others by requisition. Usually, semiautomatic supply is the method of supply used when a command is progressively gaining control over its supply functions and is securing a more balanced stock position.

*c. Supply by Requisition.* Normally, all quartermaster class II and IV supplies required to meet the needs of units, activities, or forces are supplied on the basis of requisition. This method of supply is used when a command has established adequate stock control procedures and a satisfactory stock position in relation to its approved levels of supply.

## CHAPTER 5

### DISTRIBUTION

---

#### 35. Supply Phases

Distribution procedures in a theater of operations will vary according to the phase of theater development and the tactical and logistical situation. There are normally three phases of theater development.

##### *a. Initial Phase.*

- (1) During the initial phase of an invasion, when a beachhead has been established or when a port has been captured, quartermaster supplies are distributed from supply installations on the beach or at the port direct to using units without passing through intermediate supply installations. Quartermaster supply and service units are attached to the invasion forces to handle the quartermaster supplies.
- (2) During this phase, the quartermaster company, amphibious support brigade, may be assigned to forces in the marshalling area to expedite arrangements for supply. The brigade quartermaster prepares annexes to administrative orders issued by the commander of the



assault forces. The class II and IV section of these annexes should contain a list of the clothing and equipage available for supply at the earliest practical time after the assault, the clothing and equipage that may accompany troops in organizational vehicles, and the organizational clothing and equipage that may accompany units and organizations during the assault.

- (3) After the assault has been made and the army is assigned to continue the operation, the army quartermaster should schedule the early arrival of the quartermaster clothing and general supplies company, or any of its platoons, to establish control over the class II and IV beach reserves that have been unloaded on the beach. During the first stages of the assault, certain supplies may be issued automatically. Certain expendable items (app. IV) will be issued through class I supply points. Formal requisitioning, however, should begin as soon as the situation permits.

*b. Buildup Phase.* The buildup phase is the transitional period between the initial invasion and a fully developed theater.

- (1) When the beachhead or port area is expanded to include an army base and/or an army service area, distribution procedures become more formalized. In-

stallations, such as supply points or small depots, may be established in the rear area. Quartermaster supplies are distributed from these installations to division distributing points for the support of combat and other troops.

- (2) When the invasion expands further inland, a small communications zone or a communications zone section is established in the former army base and army service area; the army service area is developed forward of the communications zone. Depots are operated near ports for port clearance and small depots may be established in the communications zone. Quartermaster supplies are distributed through these installations forward to distributing points for the support of troops.
- (3) During the buildup phase of supply, a class II and IV depot may be established in the beach area to take care of beach reserves of class II and IV items. As bulk supply operations begin, the depot may set up a schedule of issue in order to regulate supply and to establish an orderly flow of traffic. During the buildup phase, the depot may begin to utilize stock control procedures and estimate stock levels and days of supply. Class I supply points will continue to issue certain expendable class II and IV supplies.

*c. Fully Developed Theater Phase.* A fully developed theater is usually established gradually as combat operations expand inland. Distribution procedures become more routine, existing supply installations are enlarged, additional installations and facilities are constructed, and stocks of supplies become more balanced throughout the theater. Quartermaster supplies are distributed from the ports to communications zone depots and/or direct to army service area depots and distributing points for the support of troops.

### **36. Supply Installations**

*a. General.* Supply installations in the theater of operations that distribute the bulk of class II and IV items are depots, class I supply points, and class II and IV distributing points.

*b. Communications Zone.* In the communications zone, quartermaster class II and IV supplies may be handled by general or branch depots, depending on theater policy, supplemented by key depots (depots handling stocks of selected items, such as repair parts).

*c. Combat Zone.*

- (1) In the combat zone, class II and IV supplies are handled by the army class II and IV depot. The army depot distributes quartermaster class II and IV supplies to divisions direct from the depot. Divisions distribute class II and IV items from division distributing points to using units (fig. 1).

- (2) Some fast-moving items are distributed through class I supply points. When necessary, seasonal changes of clothing and equipment may be issued at class I supply points. Depot personnel will be detached temporarily from their normal duties at the depot to issue the clothing and equipment to units.

### **37. Flow of Supplies**

a. The flow of quartermaster class II and IV supplies must be from the source of supply to consuming units. The major source of supply for class II and IV items for a theater of operations is industry in the continental United States.

b. Normally quartermaster class II and IV supplies enter the theater at ports and move to supply installations in the communications zone. If the communications zone has been divided into sections, the first stop may be a base section depot. Here, certain special processes occur, including identification, inspection for condition, picking up the items on stock records, and other necessary processing.

c. For items used in the combat zone, class II and IV supplies are shipped as far forward as possible. The maximum number of installations are bypassed.

d. From depots in the advance section of the communications zone, items normally move to army quartermaster class II and IV depots in the army service area. At these depots the policy is to maintain balanced stocks of limited size,

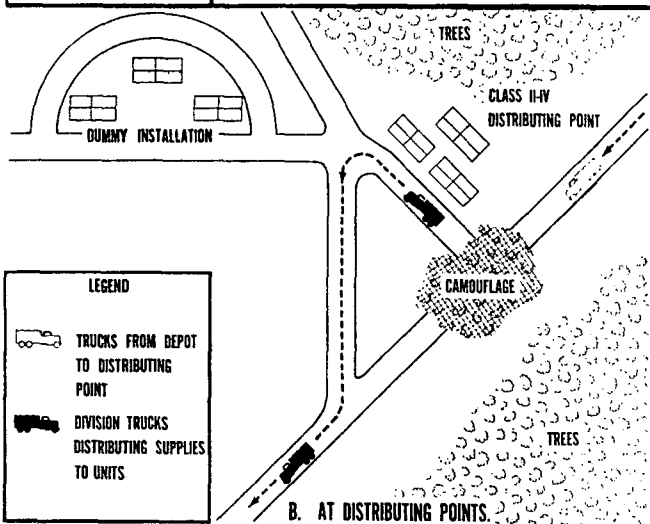
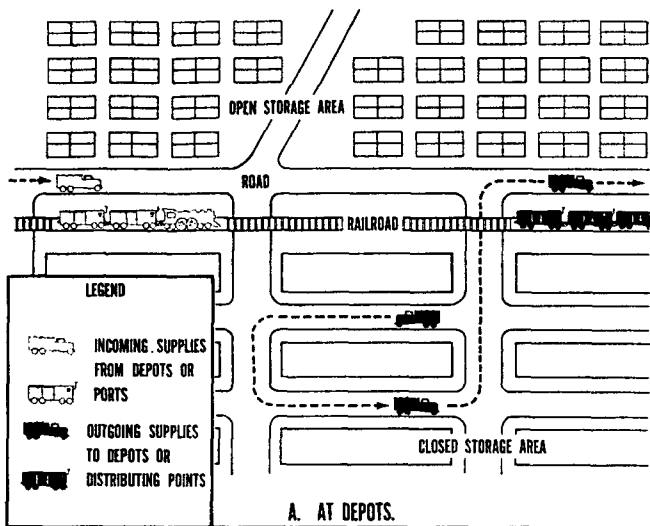


Figure 1. Distribution of class II and IV supplies at depots and distributing points in theaters of operations.

consisting mostly of items in common use. In terms of supply levels, the army quartermaster class II and IV depot will normally maintain a level of supply based on army maintenance factors and theater policy. The army class II and IV depot may issue to units in the army service area, and may also deliver certain quartermaster class II and IV supplies to army class I supply points for designated divisions. Normally, divisions will obtain quartermaster class II and IV supplies at the army class II and IV depot on an assigned day of the week. In emergencies, requisitions for quartermaster class II and IV supplies may be submitted direct to army quartermaster class II and IV depot and obtained the same day.

*e.* For items of quartermaster class II and IV supplies used in the communications zone, depots are established convenient to using organizations. These depots are assigned a mission of retail issue of class II and IV to specific organizations in their area.

### **38. Direct Exchange**

Direct exchange is an expedient method of getting limited amounts of essential items to using troops and organizations.

*a. Clothing.* When authorized, class II and IV depots may supply clothing to bath units for the operation of a clothing exchange at a bath point. Clean clothing is exchanged for soiled clothing on an item-for-item basis at the bath point.

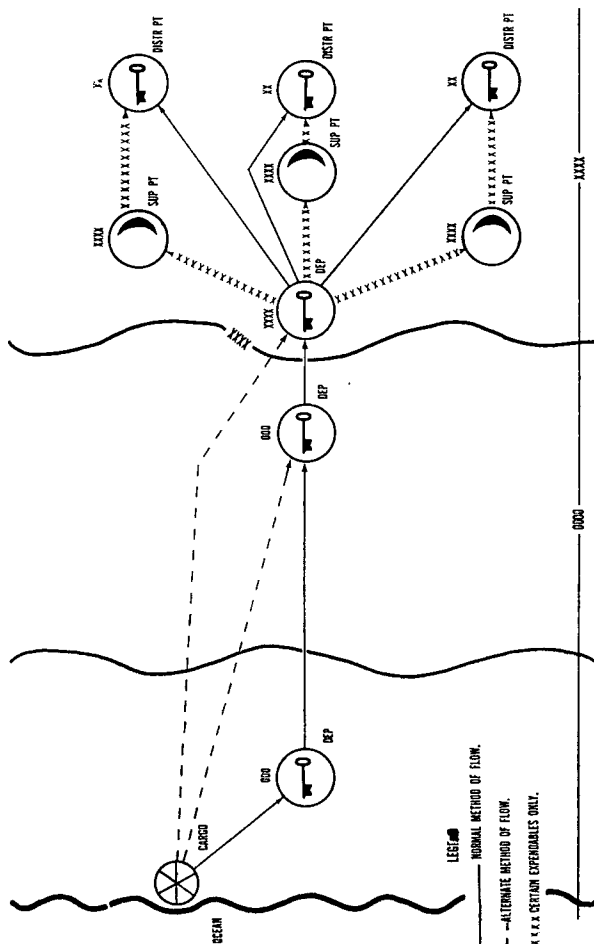


Figure 2. Flow of quartermaster class II and IV supplies in a theater of operations.

*b. Parachutes.* Parachutes requiring maintenance or replacement are turned in on a direct exchange basis to army depots by using units. The army depot effects an exchange of the turned in parachute with the responsible communications zone installation. Stocks of the communications zone installation are replenished either by requisition or through maintenance and supply channels.

*c. Mechanical Equipment.*

- (1) When authorized, direct exchange of mechanical equipment is made at maintenance installations. Items classified as unrepairable by the reclamation and maintenance unit are forwarded to appropriate salvage points. Copies of the work request and job order showing items salvaged are the basis for a replacement requisition.
- (2) Reclamation and maintenance units may be authorized to issue repair parts on a direct exchange basis within authorized allowances to supported units, when such issues will expedite the return to immediate service of items requiring repair.

### **39. Replacement by Certificate**

Informal certificates of loss may be prepared by divisions and other units and submitted to depots to obtain replacements for class II items that have been lost in combat.



#### **40. Expendable Items**

*a. Cleaning and Preserving Materials.* Cleaning and preserving materials may be distributed with class I supplies. They may be distributed automatically on allowances announced by the army quartermaster or other appropriate headquarters. If, for example, the army quartermaster directs that cleaning and preserving materials will be issued on a certain day, supplies are delivered to class I supply points with the ration convoys. Divisions then draw the supplies according to the scale prescribed in the army quartermaster standing operating procedure.

*b. Stationery and Office Supplies.* Stationery and office supplies are distributed through class II and IV depots based on formal requests submitted by using units. Distribution is made in accordance with established allowances, and covering a prescribed consumption period, usually a month. Quartermasters responsible for these supplies establish requesting procedures and allowances based on TA 10-100-40.

#### **41. Captured Materiel**

*a. Policy.* Generally, captured quartermaster-type class II and IV materiel is issued to allied governments of the United States, civil affairs/military government agencies for civilian relief, prisoners of war, or retained for use of the United States.

*b. Clothing and Equipment.* Items of captured clothing and general equipment are normally is-

sued to prisoners of war. These supplies are kept separate from other stocks at depots.

*c. Parts and Tools.* Captured repair parts and tools that can be used or adapted for use on United States equipment may be distributed in place of standard United States equipment through the class II and IV system.

## **42. Chaplain's Supplies**

*a.* Ecclesiastical property supply is the responsibility of the chief of chaplains in the theater of operations. As the chaplain has no supply organization, the distribution of ecclesiastical property in a theater is a quartermaster responsibility.

*b.* Requests for ecclesiastical supplies are determined by communications zone, army, and division quartermasters far enough in advance for requisitions to be processed and supply action to be coordinated by the chief of chaplains and the theater army quartermaster. The items are then distributed to chaplains through normal class II and IV supply channels.

## **43. Special Service Supplies**

Special service supplies requisitioned by special service officers are received, stored, and distributed in the theater of operations by communications zone, army, and division quartermasters.

## **44. American National Red Cross Supplies**

*a.* Supplies of the American National Red Cross are received, stored, and issued through the depot

system in the theater of operations. These supplies are accounted for on Army stock record cards under separate accounts. They are stored separately from Army supplies.

b. American National Red Cross supplies consist of cigarettes, socks, and other items, and are clearly marked "A.R.C." These supplies are treated as the private property of the American National Red Cross, and are issued only to accredited representatives of that agency. Requisitions for these supplies must be approved by the American National Red Cross supply official attached to the depot.

#### **45. Civil Affairs Supplies**

Class II and IV-type items for the use of civilians in the theater of operations are received, stored, and distributed through the depot system of the Army. Such supplies will be physically separated from other supplies, and will be issued only to civil affairs representatives by direction of the appropriate quartermaster. Issue of civil affairs supplies will be made at the depot on shipping documents.

#### **46. Issue of Supplies to Foreign Governments**

a. Issue of quartermaster class II and IV supplies will be made to foreign governments in accordance with theater policy.

b. Issues to foreign governments are normally made on Army shipping documents. Each document will be marked REIMBURSEMENT REQUIRED, and will cite the authority for issue.

The following typed certificate will be signed by an authorized representative of the receiving agency:

"I certify that I am an agent of the ..... Government, duly authorized to bind said government. The quartermaster supplies and services described above have been furnished this date for use of ....., an agency of said government.

(Unit)

This charge for assistance constitutes an obligation of the ..... Government to the United States of America, and is subject to full cash payment in United States dollars or acceptable dollar instruments upon presentation of the bill of the United States to the ..... (name of ministry or headquarters responsible for payment)."

#### **47. Utilization of CONEX**

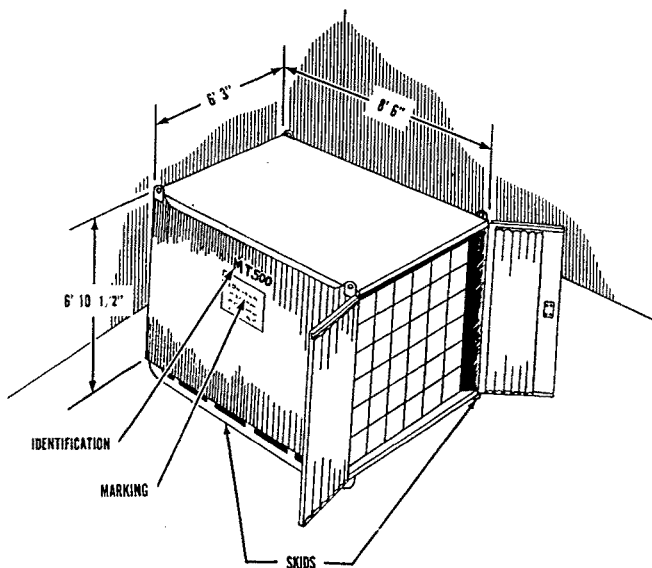
CONEX is the abbreviation of the phrase "Container Express," and identifies an overseas shipping operation involving the use of cargo transporters.

a. A cargo transporter (fig. 3) is a reusable steel container approximately 8 feet long, 6 feet wide, and 6 feet high, with a shipping cubage of 365 cubic feet and maximum payload of 9,000 pounds. It is fitted with skids and lifting eyes to facilitate handling and stacking. Access is by a double door across the width of one end.

b. These cargo transporters, which allow small packages to be shipped as a unit and protected from damage, are usually used to ship repair parts.

c. In loading cargo transporters, packages should be arranged to prevent damage. Slack

space should be controlled and doorways adequately blocked and braced to prevent shifting of supplies.



*Figure 3. Cargo transporter loaded for shipment.*

## **CHAPTER 6**

### **STORAGE**

---

#### **48. General**

The storage of quartermaster II and IV supplies includes the selection of sites for quartermaster class II and IV installations, determination of space requirements, warehouses, and the physical operation of depots and other supply installations. Operation of depots may include the technical processes of receipt, unpacking, identification, marking, inspection, and maintenance of supplies and equipment in storage, as well as the loading, issue, transfer, or other distribution of supplies.

#### **49. Responsibility**

The responsibility for storage of quartermaster class II and IV supplies rests primarily on the theater army and communications zone quartermasters who, subject to the supervision and coordination of G4, establish policies governing the storage of supplies, assign responsibility for storage and issue, and set forth the missions of quartermaster supply installations. In implementing these policies and procedures, staff quartermasters at all levels must coordinate with their commanders in the establishment of specific procedures for the storage of quartermaster class II

and IV supplies within the command. They must compute and submit to their commanders storage space requirements for quartermaster class II and IV supplies, and must keep the commanders advised of all matters pertaining to class II and IV storage operations.

## **50. Selection of Sites**

*a. Basic Considerations.* Site selection should be governed by the following factors:

- (1) The mission that the installation is to accomplish. Quartermaster class II and IV supply installations generally must be located at a site accessible to units being served.
- (2) Distances of the supply installation from drawing units and the source of supply for the supply installation.
- (3) Extent and condition of the transportation net.
- (4) Defensibility of the supply installation. This includes security of the site from observation and attack.
- (5) Provision of adequate areas for dispersion and for performing operations at the site. Large installations such as depots, should be located with adequate distance between storage installations in order to decrease damage from enemy use of atomic weapons.
- (6) Availability and usability of existing buildings.

- (7) Water supply, drainage, flood levels, hardstandings, and facilities for proper sanitation.

*b. Transportation Facilities.*

- (1) *Rail.* Quartermaster class II and IV storage facilities should be located convenient to railways, where practicable. Where existing highways are poor and railways available, railways can handle the bulk of class II and IV supply shipments.
- (2) *Highway.* Quartermaster class II and IV storage sites should be convenient to improved roads capable of supporting truck transport under sustained operations.
- (3) *Water.* When practicable, quartermaster class II and IV storage sites should be located near waterways, as large volumes of varied types of cargoes can be handled where unloading facilities are adequate.
- (4) *Air.* When practicable, quartermaster class II and IV storage facilities should include or be accessible to an airstrip to provide for receipt or delivery of items by air transport.

*c. Space Requirements.* In addition to actual storage space requirements, sufficient area must be available at quartermaster class II and IV supply installations to provide space for receiving, classifying, and issuing supplies; as well as



for bivouac, administration, and turnaround of vehicles.

*d. Availability of Civilian Labor.* If possible, the facility should be located in an area where civilian labor is available.

## **51. Storage Principles**

*a.* Quartermaster clothing and general supplies are needed everywhere in the theater, and for some items, particularly those in class IV, requirements are greater in rear areas than in the combat zone. For this reason, and in the interest of supply flexibility, the bulk of quartermaster class II and IV supplies in a theater should be held well to the rear.

*b.* When quartermaster class II and IV items are placed in forward depots, the area in which they can be used is restricted, as the impetus of supply must be from front to rear, though in special cases it may have to be lateral. It is necessary, therefore, to store limited stocks of relatively fast moving items in forward depots and to maintain more substantial stock of all class II and IV items to the rear. The items in forward storage, however, must be immediately available to users, with a reasonable reserve to allow for interruption in supply movements, destruction of stocks by hostile action, or unforeseen demands.

*c.* In order to avoid congestion and undue delays, the principles of storage and warehousing as set forth in TM 743-200 and TM 10-250 should be observed.

## 52. Storage Factors

Allocation of inside and outside storage space will be based on storage factors for class II and IV supplies given in FM 101-10.

*a. Closed Storage.* As the amount of space available for closed storage in a theater of operations usually is inadequate, every cubic foot of available space must be used to the maximum extent.

(1) *Estimating usable space.* The average net usable space in any warehouse may be estimated generally as 60 percent of the gross space. This leaves 24 percent for aisles or lost space, and an additional 16 percent as a safety factor. This estimate is computed by taking the net square feet of storage space required and adding 40 percent to obtain the gross space needed (TM 743-200).

(2) *Arranging storage space.*

(a) *Fast-moving items.* Fast-moving items must be stored in areas where trips from blocks of supplies to shipping areas will be as short as possible.

(b) *Heavy items.* Heavy items must be stacked where the floor load capacity is greatest and, if possible, close to the packing and shipping area. Low-ceilinged areas in many cases can be used for heavy items.

(c) *Light items.* Light items should be stacked in areas with high ceilings

where stacks can be increased to maximum height.

- (d) *Items subject to pilferage.* Small items that may be subject to pilferage must be stored in a locked room near the office of the storage section, or kept under guard.

b. *Open Storage.*

- (1) *Roadways.* Existing roadways should be used as much as possible when establishing a system of roadways. Roads should be located near stacks and at the same level. Roadways should be hard-surfaced, if possible, and wide enough to permit passing of incoming trucks while trucks at loading points are being loaded or unloaded.
- (2) *Loading points.* Loading points should be high enough to bring truck beds to the level of supplies and make lifting unnecessary.
- (3) *Aisle locations.* Aisles should be wide enough to accommodate conveyors and other materials-handling equipment, and personnel for storage operations.
- (4) *Stacks.* Stacks may be either rectangular or pyramidal. Unroofed supplies should not be too high for effective camouflage. Supplies under a roof should be built as high as the nature of the supplies and available space permits. Rectangular stacks to be covered with paul-

ins should be built with sloping tops for better drainage of water.

- (5) *Dunnage*. Dunnage should be laid out and built before the arrival of supplies to expedite the storage of the supplies. Dunnage may be made of bamboo, logs, railroad ties, pallets, or steel matting. Other suitable materials may also be used. In emergencies, boxes and crates can be used to keep supplies and equipment directly off the ground. Crated items can often be stacked for a short time on 2 by 4's, or 2 by 6's, logs, or other supports, when the ground is firm or the load is light enough.

- (6) *Paulins*. Paulins may be put directly over stacked supplies or used to cover any type of supporting framework over the supplies. In the tropics, paulins should normally be supported so that humid air can circulate around stacks. Paulins should cover the top two-thirds of the stack and the bottom one-third should be left uncovered. To hold paulins securely over stacks, ropes may be tied to cases or bundles in the stack or to tent pins driven in the ground. A paulin shed or roof can be spread over a supporting wooden frame. Edges of the structure should extend beyond all sides of the stack, and the structure tied to cases or tent pins driven in the ground.

- (7) *Tents.* Various types of tents may be used to protect class II and IV supplies. In the tropics, sides of tents should be left up and doors open to provide maximum circulation of air in fair weather.

### **53. Stock Locator System**

A master locator chart or diagram must be prepared by the quartermaster class II and IV installation and be constantly available. The chart should record space layout, and include size, shape, and location of all storage areas. Identifying symbols should be assigned to all areas (fig. 4). For a distributing point, a record of stock locations by cards may be maintained.

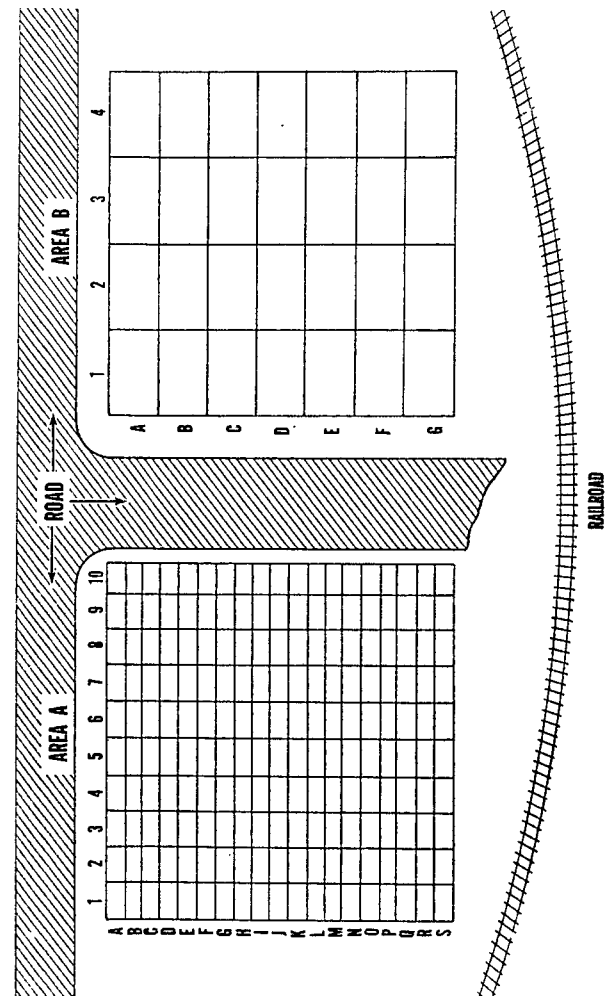


Figure 4. Master locator chart for class II and IV depot (suggested).

## CHAPTER 7

### STOCK CONTROL

---

#### 54. Purpose

Stock control is designed to secure the most effective control, distribution, and use of quartermaster class II and IV supplies at supply installations. The purpose of stock control is to insure that—

*a.* Each supply installation has on hand an adequate, but not excessive, quantity of class II and IV supplies to meet anticipated demands.

*b.* Reserves of class II and IV supplies are set up to meet emergencies.

*c.* Requisitions are promptly filled, with a minimum of back orders or depot refusals.

*d.* Excess and surplus supplies are quickly returned to supply channels.

*e.* Shortages in stock levels are discovered and corrected before consuming units are affected.

#### 55. Stock Control System

The theater stock control system must reflect the stock position of each quartermaster class II and IV item. Supplies on hand, supplies due in, and supplies due out must be included, but supplies in supply points, distributing points, or in the hands of consuming units need not be included.

*a. Supervision.* The responsible quartermaster will supervise the operation of the stock control system within the command.

*b. Procedures.* An efficient quartermaster class II and IV stock control system must furnish accurate data as to total stocks on hand, dues in and dues out, receipts and issues, authorized stock levels, quantities in transit, and other pertinent data. This information is used for procurement, requisitioning, distribution of incoming shipments, redistribution of unbalanced stocks, and disposition of excesses.

*c. Stock Status Reports.* Stock status reports are prepared on DA Form 2051-R (fig. 5) by depots and submitted periodically to higher headquarters, as prescribed, in order to maintain a complete centralized stock control system. DA Form 2051-R will be reproduced locally on 10½ by 8 inch paper.

*d. Use of TWX.* The transmission of data by teletype (TWX) is used in the depot system to keep depot quartermasters informed of immediate changes in supply and demand for class II and IV items. Depots having shortages to report, may transmit such reports by TWX to rear supply echelons. However, since such documents as shipping orders and requisitions contain a great deal of detailed information, not all supply information can be sent by TWX, and many documents must be sent by courier.

*e. Use of Electronics.* Data used in the depot supply system for class II and IV operations can be processed by means of electric data-processing



STOCK STATUS REPORT		INSTALLATION		OPERATED BY		DATE	
PERIOD		LOCATION (Coordinates)		OPERATING PERSONNEL		DATE	
From (Date)	To (Date)	P 866543		US	Others (Specify)	11 MAR 58	
1 MAR		8 MAR		501	6 (civ)		
STOCK NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY RECEIVED SINCE LAST REPORT	QUANTITY ISSUED SINCE LAST REPORT	QUANTITY IN-OUT	QUANTITY ON HAND	
8465-337-8698	BAG, BARRACK, DENIM, OD	EA	2,000	1,500	2	502	
8465-162-6150	BELT, PISTOL, M-1936, OD	EA	500	50	20	470	
8465-255-8223	PACKBOARD, PLYWOOD	EA	100	5	1	96	
TYPED OR PRINTED NAME OF AUTHENTICATING PERSON				SIGNATURE			
JOHN A. SMITH, LT. COL., GMC				John A. Smith			

DA FORM 3051-R, 1 DEC 57

Figure 5. Stock status report used in depot operations.

equipment. By use of this equipment, data is transcribed from basic material to cards or tapes by punching or marking. Great speed is obtained by use of electronic computers in performing mathematical computations, such as adding, subtracting, multiplying, and dividing, as well as making comparisons of numbers or characters.

## **56. Stock Levels**

Stock levels are supply levels converted to quantities of items and stated in total amounts of each item in units of issue. Stock levels are used as a basis for requisitioning and stockage computation. They are computed for each supply installation and for each item the installation stores and issues. Stock levels are computed by multiplying replacement factors or consumption rates by the strength of troops to be supported by the time period involved. The levels may be adjusted, taking into consideration the following:

- a. Changes in composition of the forces supported.
- b. Seasonal requirements.
- c. Anticipated operations that might create special requirements.
- d. Revision of replacement factors and consumption rates as a result of issue experience.

## **57. Review of Stock Control Records**

- a. Periodic reviews of stock control records for class II and IV supplies are made to determine the stock position of all items, and thereby main-

tain stocks as nearly as possible within operational requirements. The review also will consider stocks on hand, stocks due out, and stocks due in from depots in the supply system.

b. As the result of this review, positive action is taken to replenish stocks by placing requisitions on the appropriate supply agency.

## **58. Documentation**

Documentation consists of procedures for the preparation and maintenance of records by which supplies are identified as to quantity, description, location, or designation of items during the entire time they are in transit in the supply system. Efficient documentation gives accurate information concerning supplies due in or due out, as well as the physical location of specific quantities of specific items and their routing while in transit. When an installation ships supplies by any means, it is essential that information as to destination and contents of the load be provided for each shipment, in addition to the marking on the separate packages. Documentation assists stock control and is a means by which traffic control personnel insure that supplies reach the depot or the supply point to which dispatched.

a. *Stock Record Cards.* A record of receipts and issues will be maintained by depots on stock record cards. Separate records will be maintained for each item or size having a separate stock number and description. Items that are essentially identical and are interchangeable, may be consolidated on the same card. Active stock

record cards are grouped by commodity and filed in accordance with the stock number arrangement and sequence appearing on stock lists for each category. Nonstandard items not appearing in the stock lists will be filed in the proper place in accordance with the sequence of their description within the category.

*b. Voucher Registers.*

- (1) DA Form 272 (Register of Vouchers to Stock Record Account) is maintained by all depots (fig. 6). All vouchers will be recorded. The vouchers will show class II and IV supplies received, stored, issued, or otherwise disposed of. When a requisition or shipping document is received at the depot, the documents are registered and assigned a credit voucher number. Subidentification numbers will be assigned later for each transportation unit, or due-out release.
- (2) Procedures for maintenance of voucher registers given in SR 780-40-1 will be followed when a more thorough method of stock control can be adopted in the theater of operations.

*c. Vouchers.*

- (1) Vouchers are annotated to indicate that proper posting has been made. Before filing, vouchers should again be checked against posting to insure that no postings have been overlooked.
- (2) All vouchers should be filed in numerical sequence by fiscal year.

[illegible]

Figure 6. Register of vouchers used in theater class II and IV supply operations.

- (3) Vouchers should be filed to support all postings, including cancelled vouchers. Cancelled vouchers should be certified as to cause for cancellation.
- (4) Vouchers should be filed, where practicable, in books of 100 each. The manila folders should be secured with fasteners. Books should be filed in sequence by the number of the first voucher included.

## **59. Inventories**

Periodic inventories of stocks on hand are taken at quartermaster class II and IV depots, in accordance with policies within the theater of operations. Inventory count slips are used by inventory units to make supply accounting adjustments. Discrepancies are rechecked and all available vouchers checked in efforts to resolve overages and shortages. When items are found that are not listed on stock record cards, the items are recorded on new cards or existing records corrected. Inventory adjustment reports will be used to adjust inventory discrepancies.

## **60. Mechanized Accounting Methods**

When the size and volume of transactions in a theater of operations allow the use of electric accounting machines, mechanized accounting methods will be used for class II and IV supply in the depot system. The use of mechanized accounting procedures must be approved by Headquarters, Department of the Army upon request of the theater commander or head of technical service.

## CHAPTER 8

### AERIAL SUPPLY OPERATIONS

---

#### 61. Importance

The aerial supply and resupply of troops in a theater of operations is a principal supply method and is integrated within the logistical system at the theater level. The advent of atomic weapons makes it desirable to supply by air—and improved operational aircraft make it practicable. Air transportation provides a speedy and effective method of delivering supplies to support an airborne operation. It should be considered a major means of supply rather than an alternate or an emergency means of alleviating supply deficiencies.

#### 62. Airborne Operations

*a. General.* The mission of administratively supporting airborne operations is assigned to the communications zone. Communications zone normally delegates the responsibility for mounting and supporting an airborne operation to one of its sections, usually the intermediate section or base section. Immediately upon notification that an airborne operation is planned, the quartermaster of the command charged with the logistical support of the operation coordinates with G4 of the command concerning supply requirements

of the operation. On the basis of information received from the G4 concerning the size and type of the airborne operation, the quartermaster will be prepared to recommend to his commander the following:

- (1) Plans to provide maintenance support to the airborne force during the marshalling phase.
- (2) Plans to provide technical inspection teams to assist the airborne force during the marshalling phase.
- (3) Schedule for the movement of necessary supplies to the designated airfields.
- (4) Any requirements for additional materials handling equipment.
- (5) Location and size of storage facilities available for use by the airborne force to store equipment not needed for the airborne operation.

*b. Phases of Supply.*

- (1) *Assault.* Before the assault phase, class II and IV supplies are issued to units at the marshalling area and accompany the assault elements of airborne units into the objective area. Normally, the quantity of class II and IV supplies is sufficient to sustain the unit for 3 days.
- (2) *Followup.* During the followup phase, scheduled class II and IV supplies are delivered direct to forces in the air-head. Delivery is made by air-landing, parachute, or free fall. Normally, followup supply is prepackaged to corre-



spond to anticipated daily requirements. Provision is made to permit flexibility in composition and delivery of daily requirements. Followup supply is discontinued as soon as practicable.

- (3) *Routine.* Routine supply consists of replacement and consumption supplies delivered to the airhead in bulk for distribution by normal supply procedures and reserve supplies to build up to the desired level. Routine supply procedures usually are instituted only in independent type operations. During the routine supply phase of an airborne operation, replacement and consumption supplies, plus reserve supplies, are delivered to the airhead and are handled in generally the same manner as in normal ground operations. Army type supply points are established as required. Delivery of supply by air should be as far forward as possible, consistent with the situation. Units requisition in the normal manner, and stock control records are maintained.

### **63. Routine Method of Supply**

*a. General.* The theater J4 through the theater transportation and allocation board (TTAB), with the approval of the theater commander, establishes priorities for the use of air transportation within the theater. Each of the services and joint forces maintain coordination by establishing an

airlift liaison coordinating officer (ALCO) at air transport movement control (ATMC) sections. Communications zone and field armies send requests for air transportation, within their established allocations, direct to the ALCO. He processes them in accordance with the policies, priorities, and allocations of the theater army commander; coordinates the request with ATMC; and arranges with the shipper for delivery of the cargo to the designated air terminal at the required time.

*b. Routine Requests.*

- (1) Requests for air transportation of supplies within the field army area are submitted to the field army transportation officer. The requests contain the following information:
  - (a) Quantity and type of supplies to be moved.
  - (b) Present location, where and when supplies are to be delivered, and recommended priorities for movement.
- (2) The field army transportation officer processes the requests in accordance with policies and priorities established by the field army commander to determine whether air or other means of transportation should be used.
- (3) If air transportation is to be used, the transportation officer considers the following to determine which method of air delivery should be used:

- (a) Capability of assigned army transport aviation units.
  - (b) Troop carrier airlift allocated to the field army.
  - (c) Priorities established by the field army commander for the use of each.
- (4) If army transport aviation is to be used, the field army transportation officer advises the army aviation unit concerned, the shipping unit, the receiving unit, and other interested agencies.
  - (5) If army transport aviation is not available or suitable, the troop carrier airlift allocated to the field army is used.
  - (6) The transportation officer contacts the ALCO and arranges for aerial delivery to be made. He then notifies the shipping unit, receiving unit, and other interested agencies.
  - (7) When it is desired to make use of that portion of the communications zone allocation which the theater army has specified for support of the field army, the request for supplies is submitted to the communications zone with a designated priority for air movement.
  - (8) The communications zone transportation officer consolidates requests for air movement of supplies, processes them in accordance with established policy, and contacts the ALCO for delivery of approved requests. He then notifies the

shipping and receiving units of the arrangements for the movement.

*c. Emergency Requests.*

(1) Emergency requests for aerial delivery of supplies are transmitted by the fastest means of communications available consistent with security and will contain as much of the following information as is appropriate:

- (a) Types and quantities of supplies and when needed.
- (b) Recent and significant friendly and enemy activity to include known and predicted dispositions of both forces.
- (c) Exact locations and brief descriptions of primary and secondary drop zones (DZ), airfields, landing strips, and landing zones (LZ).
- (d) Weather conditions.
- (e) Marking of DZ, airfield, landing strip, or LZ.
- (f) Reference to prearranged signal plan for communications between the aircraft and the ground unit.
- (g) Recommended method of delivery of supplies—parachute, free-fall, or air-landed delivery.
- (h) Any requirements for evacuation of materiel from the unit(s) receiving the supplies.

(2) Intermediate headquarters approving the requests provide the following addi-

tional information concerning priority, if appropriate:

- (a) Radio call signs and frequencies of air control teams that may assist in guiding the aircraft delivering the supplies.
  - (b) A brief of the scheme of maneuver and friendly and enemy dispositions which may affect delivery of supplies.
  - (c) Instructions pertaining to the coordination of the flight with fire support in the delivery area.
- (3) Division G4 evaluates requests arising within the division and acts upon them within the policies established by the commander. If the request is approved, it is given a priority and additional information is included, if appropriate. The request is forwarded to field army with an information copy to corps. The requesting unit is advised of the action taken. If the requested mission conflicts with present or future corps operations, corps will inform the field army commander, making recommendations as to the resolution of the conflict.
- (4) At field army, the G4 exercises general staff supervision over air transportation, normally through the transportation section. The request is evaluated by the field army transportation officer who places it on a priority list for supply by air and determines whether the de-

livery should be made by Army transport aviation or troop carrier airlift allocated to the field army. Having determined this, he arranges for the delivery as in *b* above.

## **CHAPTER 9**

### **AMPHIBIOUS OPERATIONS**

---

#### **64. Essential Supplies**

During the assault phase of an amphibious operation, only the most essential class II and IV supplies will be handled by the quartermaster units supporting the landing forces.

#### **65. Planning**

Plans for necessary class II and IV supplies for troops are executed before the landing forces move to the assault from shore or ship. Instructions issued before the assault will prescribe the clothing and equipment that troops will carry with them, clothing and equipment that must be turned in and carried as part of the reserve, clothing and equipment that may be carried as a part of unit loads, and organizational clothing and equipment that is to accompany units.

#### **66. Sets and Packs**

Class II and IV supply, initially, may be a matter of resupply from beach maintenance sets or assault packs. Beach maintenance sets are normally based on the needs of 5,000 men for 15 days, skid-loaded and palletized, and distributed by the quartermaster directing supply for the amphibious operation. Assault packs are

issued as required and contain essential supplies needed by the individual soldier during the assault phase of the operation.

## **67. Supply Points**

The quartermaster of the amphibious operation directs the activities of the supply point or points where incoming supplies are segregated, recorded, stored, and issued. Units, such as brigades, will operate supply points for subordinate units.

*a.* Little or no clothing is issued to troops during the initial stages of the operation on the enemy shore. Necessary replacements of maintenance sets and assault packs are issued to troops on a replacement or priority request basis by the supply points.

*b.* Replacement issue should be started as soon as possible. A tentative date to resume the issue of class II and IV supplies on a replacement basis should be published in the quartermaster section of the administrative order covering the operation.



## **APPENDIX I**

### **REFERENCES**

---

#### **1. General Indexes**

- DA Pam 108-1 Index of Army Motion Pictures, Film Strips, Slides and Phono-Recordings.
- DA Pam 310-1 Index of Administration publications (Army Regulations, Special Regulations, Department of the Army Pamphlets, Commercial Traffic Bulletins, General Orders, Bulletins, Circulars, and Army Procurement Circulars).
- DA Pam 310-2 Index of Blank Forms
- DA Pam 310-3 Index of Training Publications
- DA Pam 310-4 Index of Technical Manuals, Technical Regulations, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders.
- DA Pam 310-5 Index of Graphic Training Aids and Devices.
- DA Pam 310-7 Index of Tables of Organization and Equipment, Tables of Organization, Type Tables of Distribution, and Tables of Allowances.

DA Pam 310-30 Index of Supply Manuals, Quartermaster Corps.

## **2. Related Publications**

- (S) AR 11-8 Logistics Policies and Priorities (U).
- AR 59-106 Operation of Air Force Terminals.
- AR 310-3 Preparation and Processing
- AR 320-50 Authorized Abbreviations
- AR 643-55 Disposition of Personal Effects; Military Operations.
- AR 710-25 Unobligated Army Stock
- AR 711-16 Installation Stock Control and Supply Procedures
- AR 711-111 Housekeeping Equipment
- AR 725-50 Preparation and Processing Requisitions for Oversea Requirements.
- AR 735-11 Accounting for Lost, Damaged, or Destroyed Property.
- AR 740-15 Preservation, Packaging, and Packing.
- AR 743-41 Shed and Open Storage of Supplies.
- AR 750-5 Maintenance Responsibilities and Shop Operation.
- AR 750-8 Command Maintenance Inspections.
- AR 755-10 Disposition of Foreign Excess Personal Property.
- SR 32-20-1 Clothing Allowance System

SR 320-5-1	Dictionary of United States Army Terms.
Pam 320-1	Dictionary of United States Military Terms for Joint Usage.
SR 725-10-2	Processing Requisitions
SR 726-10-10	Determination of Replacement Factors and Consumption Rates (Straight Line Method).
SR 746-30-5	Marking of Oversea Supply
SR 746-30-6	Shipment Digit Marking
AR 746-2300-1	Color and Marking of Vehicles and Equipment.
AR 750-3900-1	Materials Handling Equipment
SR 780-40-1	Stock Control and Supply Procedures.
FM 5-20	Camouflage—Basic Principles
FM 5-20C	Camouflage of Bivouacs, Command Posts, Supply Points, and Medical Installations.
FM 5-22	Camouflage Materials
FM 5-23	Field Decoy Installations
FM 10-2	Headquarters and Headquarters Company, Quartermaster Group.
FM 10-6	Quartermaster Service Company
FM 10-7	Quartermaster Organization and Operation in Divisions.
FM 10-10	Quartermaster Service in Theater of Operations.
FM 10-12	Quartermaster Parts Company
FM 10-13	Quartermaster Reference Data
FM 10-17	Quartermaster Organization and Service in Army and Corps.

FM 10-18	Quartermaster Salvage Company
FM 10-22	Quartermaster Clothing and General Supplies Depot Com- pany.
FM 10-23	Quartermaster Reclamation and Maintenance Company, Semi- mobile.
FM 10-52	Headquarters and Headquarters Company, Quartermaster De- pot.
FM 10-53	Headquarters and Headquarters Detachment, Quartermaster Battalion.
FM 20-15	Tents and Tent-Pitching
FM 21-5	Military Training
FM 21-6	Techniques of Military Instruc- tion.
FM 21-30	Military Symbols
FM 38-1	Logistics, Supply Management
FM 57-30	Airborne Operations
FM 100-10	Field Service Regulations—Ad- ministration.
FM 101-5	Staff Officers' Field Manual— Staff Organization and Pro- cedures.
FM 101-10	Staff Officers' Field Manual— Organization, Technical, and Logistical Data.
TM 5-614	Packing and Crating, Repairs and Utilities.
TM 10-250	Storage of Quartermaster Sup- plies.

TM 10-260	Quartermaster Salvage in the Theater of Operations.
TM 10-1619	Quartermaster Materials Handling Equipment.
TM 38-230	Preservation, Packaging, and Packing of Military Supplies and Equipment.
TM 38-705	Army Shipping Document
TM 743-200	Storage and Materials Handling
SB 10-75	Size Substitution of Clothing and Footwear Items.
SB 10-496	Wartime Replacement Factors and Consumption Rates, Quartermaster Corps.
SB 10-523	Size Tariff for Clothing, Equipment, and Footwear.
SB 38-100	Preservation, Packaging, and Packing Supplies, Materials, and Equipment Used by the Army.
TB 10-501 through 510 series	(Parachute Packing)
TA 10-100	Allowances of Quartermaster Expendable Supplies.
TA 10-100-40	Allowances of Quartermaster Expendable Stationery and Office Supplies.
TA 21 (Mob)	Clothing and Equipment

## APPENDIX II

### REGULATED ITEMS LIST

---

The following list of quartermaster class II and IV supplies may be used as a general guide in preparing lists of regulated items:

#### 1. Clothing and Equipage

- a. Chaplain's nonexpendable supplies.
- b. Distinctive organizational flags, guidons, and streamers.
- c. All general officers' type flags, identification plates, and so forth.
- d. Parachutists' equipage.
- e. Protective clothing, permeable and impermeable.

#### 2. General Supplies

- a. *Graves Registration Supplies.* Pouch, human remains.
- b. *Materials-Handling Equipment.*
  - (1) Conveyors, all types.
  - (2) Cranes, wheeled.
  - (3) Tractors, warehouse.
  - (4) Trucks, fork lift.
- c. *Petroleum-Handling Equipment.*
  - (1) Drum-cleaning equipment.
  - (2) Containers, collapsible.
  - (3) Drums, flammable liquids.

(4) Cans, gasoline, 5-gallon.

(5) Pumps, dispensing.

*d. Special Purpose Equipment.*

(1) Special purpose equipment for bath units.

(2) Special purpose equipment for bakery units.

(3) Special purpose equipment for laundry units.

(4) Semitrailers, all types.

(5) Trailers, 2-wheel, clothing repair.

(6) Trailers, 2-wheel, textile repair.

(7) Trailers, 2-wheel, shoe repair.

*e. Office Machines.*

(1) Duplicating machines, all types.

(2) Computing machines, listing and non-listing.

(3) Typewriters.

## **APPENDIX III**

### **REQUISITIONING SCHEDULE**

---

A suggested schedule for requisitioning class II and IV supplies at army level is given below.



Type supply	For units and organizations	
	For depots	
	Frequency	Requisition destination
Regulated items	monthly	Army quartermaster through command channels.
Items in excess of authorized allowances.	.....	Army quartermaster through command channels.
Individual clothing and equipment	semimonthly	Army depot
*Special measurement clothing and footwear.	.....	Army Quartermaster
Organizational clothing and equipment.	semimonthly	Army depot
*Stationery and office supplies	monthly	Army depot
Cleaning and preserving materials	weekly	Automatic issues by class I supply points.
Other cleaning and preserving materials.	monthly	Army depot
*Air items	monthly	Army depot
*Chaplains' expendable items	monthly	Army depot

Captured materiel	.....	Army quartermaster	as directed
Prisoner of war supplies	.....	Army quartermaster	semimonthly
*Repair parts for:			
Special purpose equipment	monthly	Army quartermaster for approval only; communications zone for supply.	monthly
Special purpose vehicles	monthly	Same as above	monthly
Materials-handling equipment	monthly	Same as above	monthly
Office machines	monthly	Same as above	monthly
Bags, paper, twine for issue of subsistence.	weekly	Army class I supply points	daily or as desired
Water purification tablets and powder.	weekly	Army class I supply points	as required

\* Not normally stocked in army depot.

# APPENDIX IV

## EXPENDABLES ISSUED THROUGH CLASS I SUPPLY POINTS

---

<i>Item</i>	<i>Unit</i>	<i>Basis of issue</i>
Brush, scrubbing, floor, hand, palmetto fibre.	ea	.001 per individual, per day.
Candles	lb	.005 per individual, per day.
Compound, germicidal rinse.	pk	.001 per individual, per day, subsisting on A or B rations containing fresh fruits or vegetables.
Lime, chlorinated	lb	.0088 per individual, per day.
Matches, safety, 12 boxes per package.	pk	.0053 per individual, per day.
Paper, toilet, 1,000 sheets per roll.	roll	.015 per individual, per day.
Soap, ordinary issue	lb	.0566 per individual, per day.
Wool, steel, federal grade 1.	lb	.0003 per individual, per day.

# INDEX

	Paragraph	Page
Accounting methods, mechanized.....	60	77
Advance section quartermaster.....	18	24
Aerial supply:		
Operations .....	61-63	78
Units .....	14	17
Aerial supply company, quartermaster.....	14	17
Airborne:		
Operations .....	62	78
Quartermaster parachute supply company.	14	17
Supply and transportation company....	12	12
Air equipment repair and depot company....	14	17
American National Red Cross supplies.....	44	58
Amphibious operations .....	64-67	86
Area quartermaster .....	18	24
Army group quartermaster.....	19	25
Army quartermaster .....	20	26
Automatic supply .....	34	46
Base section quartermaster.....	18	24
Captured materiel .....	33, 41	44, 56
Cargo transporter .....	47	59
Chaplain's supplies.....	42	57
Civil affairs supplies.....	45	58
Cleaning materials .....	40	56
Closed storage .....	52	65
Clothing and general supplies depot company, quartermaster.	4	5
Clothing and textile repair company, quartermaster.	13	12
Command controlled items.....	30	39

	Paragraph	Page
Communications zone quartermaster.....	17	22
CONEX. ( <i>See</i> Container express.)		
Consumption rates .....	27	31
Container express.....	47	59
Corps quartermaster .....	21	26
Definitions .....	3	4
Demand experience data.....	27	31
Direct exchange.....	38	53
Distribution .....	35-47	47
District quartermaster.....	18	24
Division quartermaster .....	22	26
Divisional units .....	10-12	11
Documentation .....	58	74
Dues out .....	30, 54	39, 70
Dunnage .....	52	65
Exchange, direct .....	38	53
Expendable supplies .....	3, 40	4, 56
Expendable supplies issued through class I supply points.	App. IV	98
Extract requisitions.....	30	39
Flow of supplies.....	37	51
Initial requirements .....	26	31
Installations.....	36	50
Intermediate section quartermaster.....	18	24
Inventories .....	59	77
Issue to foreign governments.....	46	58
Labor teams.....	7	7
Levels of supply.....	27	31
Logistical command quartermaster.....	18	24
Maintenance units.....	13	12
Mechanical and metal repair company, quartermaster.	13	12
Nondivisional units.....	4-9	5
Office supplies .....	40	56
Open storage .....	52	65

	Paragraph	Page
Operating level of supply.....	27	31
Order and shipping time.....	27	31
Packing .....	47	59
Parachute rigging detachment, special forces, quartermaster.	14	17
Parachute supply company, airborne quartermaster.	14	17
Parts company, quartermaster.....	8	8
Paulins .....	52	65
Phases of supply.....	35	47
Preserving materials .....	40	56
Project requirements .....	28	36
Quartermaster battalion, headquarters and headquarters detachment.	9	9
Quartermaster company, infantry division	10	11
Quartermaster depot, headquarters and headquarters company.	9	9
Quartermaster group, headquarters and headquarters detachment.	9	9
Quartermaster supply company, armored quartermaster battalion.	11	11
Reclamation and maintenance company, quartermaster.	13	12
Red Cross. ( <i>See</i> American National Red Cross.)		
References .....	App. I	88
Regulated items.....	30	39
Regulated items list.....	App. II	93
Regulated supplies .....	3	4
Repaired items .....	33	44
Replacement and consumption requirements.	27	31
Replacement by certificate.....	39	55
Requirements:		
Initial .....	26	31
Project .....	28	36
Replacement and consumption.....	27	31

	Paragraph	Page
Requisitioning:		
Class II supplies.....	31	41
Class IV supplies.....	32	42
Extracts .....	30	39
Objective .....	27	31
Schedule .....	App. III	95
Supply action .....	30	39
Types .....	29	38
Retention level .....	27	31
Safety level .....	27	31
Salvage company, quartermaster.....	13	12
Scope of manual.....	2	3
Section quartermaster .....	18	24
Selection of sites.....	50	62
Semiautomatic supply .....	34	46
Service company, quartermaster.....	6	6
Shipping .....	47	59
Site selection .....	50	62
Size tariffs .....	27	31
Source of supplies.....	33	44
Space requirements .....	50	62
Special services supplies.....	43	57
Stationery .....	40	56
Stock control .....	54-60	70
Stock control records.....	57	73
Stock levels.....	56	73
Stock locator systems.....	53	68
Stock record cards.....	58	74
Stock status report.....	54	70
Stockage objective .....	27	31
Storage .....	48-53	61
Supplies:		
American National Red Cross.....	44	57
Chaplain's .....	42	57
Civil affairs .....	45	58
Flow .....	37	51
Methods.....	34	46
Office .....	40	56

	Paragraph	Page
<b>Supplies—Continued</b>		
Requisitioning .....	29-32	38
Sources .....	33	44
Special service.....	43	57
<b>Supply:</b>		
Economy .....	24	27
Installations .....	36	50
Phases .....	35	47
Principles .....	23, 24	27
Reuirements .....	25-28	30
Responsibilities .....	15-22	21
Teams .....	7	7
Supply depot company, quartermaster.....	5	6
Theater army, quartermaster.....	16-28	21
Transportation facilities, site selection.....	50	62
<b>Units:</b>		
Aerial supply .....	14	17
Divisional .....	10-12	11
Maintenance .....	13	12
Nondivisional .....	4-9	5
Voucher register .....	58	74



By order of *Wilbur M. Brucker*, Secretary of the  
Army:

MAXWELL D. TAYLOR,  
*General, United States Army,*  
*Chief of Staff.*

Official:

HERBERT M. JONES,  
*Major General, United States Army,*  
*The Adjutant General.*

Distribution:

*Active Army:*

DCSLOG	PMST Sr Div Unit
DCSOPS	Gen Depot
CAMG	QM Sec Gen Depot
Technical Stf, DA	QM Dep
Technical Stf Bd	USATC
USCONARC	Mil Mis
OS Maj Comd	MAAG
Log Comd	Units org under fol TOE:
MDW	10-17
Armies	10-47
Corps	10-127
Div	10-227
Brig	10-237
Regt/Gp/bg	10-367
Bn	10-427
Ft & Camps	10-437
USMA	10-521
CGSC	10-536
Br Svc Sch	29-57

NG: State AG; units—same as Active Army.

USAR: Same as Active Army.

For explanation of abbreviations used, see AR 320-50.